ORIGINAL

All mail should include the docket number to ensure correct filing.

Written comments can be sent to:

Arizona Corporation Commission
Docket Control Center
1200 West Washington
Phoenix, AZ 85007

Docket Number: SW-20379A-05-0489 W-20380A050490

Comments may also be submitted via the ACC Web site.

Again, the docket number is required.

For instructions on filing electronic public comment, click on www.cc.state.az.uc/utility/cons/index.htm.

Water in Perpetuity

- One-shot, Non-renewable Resource akin to an Oil Field?*
- Age of Water = 12,000 to 30,000 years (Hualapai & Detrital basins)
- 100-year supply beyond AMA - just Managed Depletion?
- In the public interest to protect groundwater (ARS 45-401.B)
- "Why can't Counties manage their growth," (Herb Guenther, ADWR)
- "A plan to obtain additional water supplies," (ARS 11-821.C.3)
  - Surface water runoff impoundment for artificial recharge?
  - Treated effluent and use of "purple pipes" (e.g. City of Peoria)
  - Use of grey water on-site (General Permit under AAC R18-9-7)
  - Incentives for rain water harvesting on-site (ARS 43-1090.01)
- Reconnect with "Means of Production" or another type of "Distributed Generation"

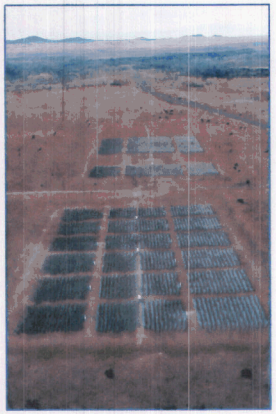
Prepared for ACC testimony on Perkins Mountain Water Co.
Kingman, Arizona, April 10, 2006, by Kevin A. Davidson

* Inspired by a City of Scottsdale web page describing the City's long-term water resources and the M-DAC website: http://www.mdac.com/

Water & Power in Perpetuity

- Copper, Cattle, Cotton, Citrus and "Climate"
- A land use suited for the "Saudi Arabia of Sun"
- Environmental Portfolio Standard (R14-2-1801 thru 1815, pending)
- A few numbers:
  - Rhodes Homes = 21,000 acres of mostly creosote/saltbush flats
  - Average Daily Solar Insolation = 24,281 kWhrs per acre (NREL)
  - 25% land coverage for Photovoltaic or Concentrating Solar & 10% conversion efficiency = 607 kWhrs per acre, per day
  - Annual output on 21,000 acres = 4,653,891,783 kWhrs or about 45% of the EPS (15%) by 2025 (69.5 billion kWhrs est. demand)

Rooftop mounted Photovoltaics



Springerville PVs

Kramer Junction 150 MW Solar Electric Plant